

In the Claims:

Kindly amend the claims as follows:

1. (Currently amended) A centralised lubrication system for lubricating cylinder faces in large diesel engines, and marine engines, including at least one lubricating apparatus with a number of reciprocating pumps actuated by cams on a rotating control shaft which is a driven shaft, reference means connected with the main shaft and which directly or indirectly indicates position of the main shaft and thereby also position of the piston sensor means detecting position of the reference means and thereby angular position as well as angular speed for the main shaft, and a control unit which is connected to and receives signals from said sensor means and which includes means to detect the angle position as well as the angular speed for the main shaft/engine piston characterised in that it includes:
  - an AC motor connected with and driving the control shaft;
  - signal converter means connected to the sensor means and to the control unit for detecting speed, direction of movement and position of the engine piston and for generating digital or electric signals indicating these parameters;wherein the control unit is adapted for receiving the digital/electric signals and is connected with and controls the AC motor for regulating the rotation of the control shaft and thereby the actuation of the reciprocating pumps; and  
wherein the sensor means include two reference sensors that are displaced from each other along a circumferential direction of the main shaft.
2. (Cancelled) without prejudice.
3. (Cancelled) without prejudice.

4. (Currently amended) Centralised lubrication system according to claim 2 1, characterised in that the reference means include teeth on a toothed rim that is preferably disposed on the flywheel of the main shaft, and an index reference means, and that the sensor means include an index sensor for detecting the position of the index reference means.

5. (Previously presented) Centralised lubrication system according to claim 1, characterised in that the AC motor is connected with a resolver which is adapted for providing a signal to the control unit for the actual angular position of the AC motor.

6-10. (Cancelled) without prejudice.

11. (Previously presented) The lubrication system of claim 1, wherein the rotating control shaft is driven synchronously with the main shaft of the diesel engine.